

REMARKS

Claims 21-22 and 24 stand rejected under 35 U.S.C. 112, first paragraph, as failing to meet the written description requirement. Particularly, the Office Action states that the claimed feature wherein first and second discharge standing pulses are applied such that a current in a first pair of display electrodes flows in an opposite direction from a current in a second pair of display electrodes is not mentioned in the specification or in the original claims of the patent application. The Office Action states that a new matter situation is raised. Applicants respectfully traverse the statement, and the rejection, for at least the following reasons.

In response to Applicants' previous remarks, the Office Action indicates that the Examiner may agree with Applicants that the actual invention may have a current in a first pair of display electrodes flowing in the opposite direction from a current in a second pair of electrodes. However, the Office Action counters that such assertion had to be included in the original specification to enable a person of ordinary skill in the art to fairly reach that such limitation is part of the invention. The Office Action further states that such description was not found in the original specification.

However, as clearly stated in MPEP 2163.07(a):

By disclosing in a patent application a device that inherently performs a function or has a property, operates according to a theory or has an advantage, a patent application necessarily discloses that function, theory or advantage, even though it says nothing explicit concerning it. The application may later be amended to recite the function, theory or advantage without introducing prohibited new matter (emphasis added).

No new matter is present if the missing descriptive matter is necessarily present in the thing described, and it would be so recognized by persons of ordinary skill.

Applicants respectfully submit that such inherent function or advantage is present in the application as filed. Particularly, the present specification, at least at page 38, lines 15-20, FIGs. 4 and 7, page 39, lines 1-5, and page 40, lines 6-16, disclose a process of applying voltage to first and second pairs of electrodes that would necessarily create the opposite flowing currents claimed. Applicants have amended the specification at page 38, line 5 to expressly recite these inherent features, and submit that due at least to such inherency, no new matter is believed to be submitted.

More specifically, a pair of adjacent electrodes constitutes a capacitor to which a charging current flows when a voltage is applied thereto, and from which a discharging current flows when the voltage is released. When a voltage more than a firing voltage is applied between a pair of adjacent electrodes a gas discharge current inherently flows therebetween in a certain time.


Applicants respectfully submit that one skilled in the art would recognize that such opposite flowing currents would necessarily be present in the apparatus and method claimed in claims 21-22 and 24. While the Office Action states that the “actual invention may” exhibit this function, Applicants respectfully submit that the applied voltages described in the present application would necessarily result in such function. Because such function is necessarily present, Applicants respectfully submit that this assertion did not need to be included explicitly in the original specification. MPEP 2163.07(a) clearly states that such function, theory or advantage need not be explicitly stated in the application.

As the disclosed apparatus and method inherently provides the function/advantage claimed, the disclosure is sufficient, and the written description requirement is thus satisfied. Accordingly, no new matter is believed to be present by the inclusion of this feature in claims 21 and 24, and the submitted amendments to the specification. For at least these reasons, Applicants respectfully submit that claims 21-22 and 24 are allowable, and thus Applicants request allowance of the claims and acceptance of the amendment herein.

Claims 23 and 25 stand rejected under the judicially-created doctrine of obviousness-type double patenting over claims 1-2 of U.S. Patent No. 6,373,452. Applicants respectfully traverse the rejection for at least the reason that claims 1-2 of U.S. Patent No. 6,373,542 fail to suggest simultaneously discharging a set of first discharge sustaining pulses in a first pair of display electrodes and a second set of discharge sustaining pulses in an adjacent pair of electrodes. Instead, claims 1-2 of U.S. Patent No. 6,373,452 define at least discharging between one Y-electrode and one X-electrode adjacent thereto on one side, and, at a separate time, discharging between one Y-electrode and another of the X-electrodes adjacent thereto on the other side. This allows, for example, odd field displaying and even field displaying at separate times from each other. Applicants thus respectfully request reconsideration and withdrawal of the rejection.

For at least the foregoing reasons, Applicants believe that this case is in condition for allowance, which is respectfully requested. The Examiner should call Applicants' attorney if an interview would expedite prosecution.

Respectfully submitted,
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